

200 Arch St.

post *Dynamite*

②

No 96

Received March 24

1824  
W. S. H.

Gran

A Dissertation  
on  
Dysentery  
submitted to the examination  
of the  
Medical faculty of the University  
of  
Pennsylvania  
For the degree of M.D.  
by Hosea Fithian  
of N. Jersey.

## A dissertation, on Dysentery.

This is a disease in which the intestines are with difficulty moved and when they are, the discharges are chiefly mucus, at the same time the natural fees are retained. Frequently the mucous discharges are streaked with blood and are characterised by severe gripping pains and tenesmus, very often the discharges appear of an albuminous nature or very thin, and watery, and occasionally of a frothy appearance and mixed with this something like hard lumps of cheese, or accompanying these, a membrane which resembles the internal coat of the intestines; and sometimes pure blood is voided.

When the discharges take place they are very frequent and it is very seldom that the natural fees appear in them, and when they do it is in a compact and hardened

form denominated *Syphala*. It was common among the ancients to seek for the more remote causes of this disease as, an acrimony of the fluids of *ingesta* of the bile and other abdominal secretions. Sydenham considers it a febrile disease directed to the intestines and thought it owing to a morbid matter brought to the intestines by the mesenteric arteries. Akenside called *Dysentery* a rheumatism of the alimentary canal, and thought dysentery and rheumatism the same. Cullen defines it a contagious fever, in which the patient has frequent stools streaked with blood. But at the present period of medical science it is not considered as such except when it puts on a *Typhoid* type and when it assumes this form it is in damp crowded places as in camps gaols hospitals and in armies where the soldiers have been on long marches and exposed to heavy rains and in those places

it generally appears as an epidemic. Cullen  
who gives the above definition considers the  
disease depending upon a preternatural con-  
striction of the colon. But that it is a bilious  
disease caused by morbid action of the liver,  
may be inferred first from its occurring most  
frequently in miasmatic countries, and appearing  
<sup>upper parts of summer and</sup> in the beginning of autumn; secondly from its  
preceding and succeeding bilious fevers, and being  
sometimes combined or complicated; thirdly  
from a yellowness of skin often accompanying  
the disease; and lastly from its being cured or  
greatly relieved by a free discharge of bile either  
by vomiting or purging.

Dysentery may be  
caused by an increased secretion of bile or it  
may be deficient. It remains to account for  
those opposite states of the liver causing this  
disease. It may be imagined that an excessive

quantity of bile of an acrimonious quality, will irritate the intestines and cause inflammation and subsequently spasm, producing gripes or tenina, or even allowing that it only produces a simple looseness of the bowel, it gradually washes off the mucus of the intestines, erodes their membranes and at last brings on severe gripes with bloody stools.

But the most frequent cause of dysentery is suppressed secretion, and excretion of bile or its retention in the duodenum. That irritation in this part should cause pain & tenesmus in other parts of the alimentary canal is no more astonishing than that pain and itching should be felt in the glands penis from an inflamed urethra. Another view of the subject will also account for the production of tenina and tenesmus from a defective secretion of bile. The feces on reaching the large intestine,

are detained there for a long time and appear to undergo a degree of incipient putrefaction, - evinced by the evolution of gases. The excrements thicken, harden, and become formed or moulded in the cells of the colon, consequently if the bile be withheld, the excrementitious matter acquires a peculiar consistency; new products originate and morbidly stimulate the coats of the intestines, causing tenesmus and an increased discharge of mucus, frequently tinged with blood. The colon for want of the stimulus of the bile, cannot expel its contents, which from being long retained, act as a foreign body, which cause inflammation and spasm.

After what has been said it remains for me to enquire into the causes which have such influence on the liver. These I shall divide into those which act on the stomach primarily, and into those which operate secondarily. In the first place it generally occurs in Marsh Miasmatic con-

tries, where this effluxia is the most copious, & active, in conjunction with the vicissitudes of the weather, and exposure to a moist, vitiated atmosphere. This taken into the stomach produces irritation of that organ, and of the duodenum, which disorders the biliary apparatus. Secondly it may occur from a sudden suppression of per-spiration. We all know there is great sympathy between the skin and alimentary canal and particularly the liver. In looking over Johnson on tropical climates, a work highly recommended by Dr Chapman, he says that in every case of Dysentery which came under his notice, two functions were deranged, these were the skin & liver, where it arose from the skin, there were cold clammy sweats, and where the liver was disordered, there were bilious sores discharged. As dysentery often precedes or succeeds the fevers of our climate produced by marsh effluxia, it

is often combined and puts on the different forms of Intermittent, and continued, and from this last it often sinks into the typhus form - which however is not often the case except when it occurs in low and crowded situations. This disease has by many been considered contagious, but the mode in which it is propagated more resembles that of a complaint attacking a number of individuals all exposed to the same exciting cause, and when the febrile symptoms are communicated by contagion, the dysenteric symptoms are so likewise. Some have considered the contagion to arise from the filth of the patients apartment, from feces and urine, remaining long in his chamber. But if this were the case Dr Chapman thinks <sup>it would</sup> be the same with every other disease and that dysentery would be taken where the greatest attention is paid to cleanliness. When it is

imparted from one person to another, it is done in a direct manner by contagion, which is secreted in the typhus state. Though it may operate in this way I believe it to be very seldom, and that its general character is that of an epidemic.

The symptoms of this disease from what has formerly been said will now be the <sup>not</sup> subject of this essay. It comes on as an acute disease; but often degenerates into a chronic form, in this case there is decayed appetite, dryness of skin, sunk features, a livid yellow complexion, great weakness and emaciation. It generally commences with a ~~loss~~ of the bowels, which will sometimes continue for a day or two without any fever attending, after which it is succeeded by a slight chill, with some degree of fever, flushings of the face, hot and dry skin, pulse full and frequent though sometimes

quick and corded, furred tongue, graping pains  
in the bowels, followed by tenesmus. In the com-  
mencement of the complaint there is often nausea  
and vomiting of bilious matter, together with  
tormina and tenesmus the sufferings of the patient  
is very much aggravated whenever he attempts to  
make any exertion, and the most easy and comfor-  
table position is when he is warm in bed. The  
patient has frequent desire to go to stool, tho' little  
is voided except mucus sometimes streaked with  
blood, together with the torpid appearance  
there is frequently discharged membranous fila-  
ments, as it were the abrasion of the intestines,  
sometimes the evacuations are of a thin watery  
consistence, or of a bilious nature or appear  
like the washings of meat. As the disease ad-  
vances, it becomes more and more developed and  
every time the patient has a stool or a desire  
to void the contents of the bowels, he feels as

though the intestines were descending, and  
not unfrequently prolapsus ani, does occur, tho'  
this is more frequent in children than in adults.  
In addition to the above remarks cases are  
related by Sydenham that there were no dis-  
charges at all, and that this arises from the  
inflammation, transcending the secretory actions.  
If this view of ulcerosity be correct, the indica-  
tions of cure are sufficiently obvious. The com-  
mendations here pointed out are those which are calcu-  
lated to remove inflammation, with the morbid  
irritation, to procure a free discharge of the con-  
tents of the bowels, and restore the skin to its  
healthy action. Here the lancet is the first rem-  
edy to be resorted to, and is clearly pointed out  
by the symptoms attending, and is at the pre-  
sent time generally employed. Early resorted  
to, it checks the inflammation and opens the  
susceptibility of the system to other remedies.

Emetics by the early writers were indiscriminately employed, and at the present time <sup>are</sup> frequently indicated by the nausea and sickness of stomach together with a furred tongue. The nostrumatis which claim our attention are purgatives. Much has been said with regard to the ones which should be employed, whether those of a mild nature or those which operate freely on the bowels.

Cullen says that the most gentle laxatives are the most safe. But if gentle laxatives — should not produce the evacuations, some how useful medicines must be employed, and I have always found nothing more proper or convenient than Antimony given in small doses, and at such intervals as may determine their operation to be chiefly by stool. But the purgatives which are generally employed are those which operate freely, and the one I have seen most frequently used is Calomel alone.

or in combination with some other of the  
class of purgatives, and after evacuating the  
bowels in this way employ castor oil to keep  
the bowels in a soluble state. The frequent and  
severe griping attending this disease, leads al-  
most necessarily to the use of opiates, but  
I have never seen them tried thus early in  
the complaint. But to calm irritation, and  
promote evacuations, injections brachion even  
with the happiest effect. After promoting free  
discharges by stool, we should endeavour to  
excite perspiration by mild diaphoretics, and  
to answer this purpose Calomel, opium and  
Specacuanha answers an excellent purpose  
given in small doses combined. Now while it  
produces its diaphoretic effect, keeps the bowels  
open and allays irritation. Specacuanha alone  
has been highly extolled especially in those cases  
accompanied with discharges of blood. To

promote the diaphoretic effect of these remedies,  
warm diluent beverages answer very well; such  
as flax seed tea, balm tea, water gruel &c great  
benefit is also derived from external applications  
such as bags of warm mush, bottles of warm wa-  
ter, cloths wrung out of warm water, or warm  
vinegar and water applied to the abdomen.  
Here the flannel collar, is very beneficial applied  
round the body and should envelope it completely.  
Much has been said of Specacuanha alone as a  
diaphoretic, this has long been employed in the  
practice and highly extolled by many practitioners  
who some give their testimony in favour of the  
antimonials but from the weight of authority  
I am disposed to give the preference to Specac-  
uanha. By Bullen and Sir George Baker it is  
said to act as a purgative, but by Moseley it is  
considered advantageous in dysentery by relaxing  
the surface and exciting diaphoresis. Two modes

have been employed in the administration of  
this remedy. By Clarke it is recommended in the  
shape of a clyster to be repeated twice or three  
in twenty four hours. This I have never seen  
employed in this way and from very respectable  
authority we are taught that a decoction  
of Specacuanha is wholly inert. Dr Playfair  
gave it in drachm doses, combined with Laud  
anum, tho' this is said to be more beneficial  
in the commencement of the attack where the  
pain has been great and the desire to stool  
frequent and ineffectual. Most writers agree  
as to the utility of blisters in this disease, differ-  
ing however in relation to the part where  
the application is to be made, by some it  
is conceded that they increase the sufferings  
of the patient when applied over the abdomen,  
and give the extremities the preference, but  
from the nature of the disease, and from analogy

I am led to believe that when applied as near  
the seat of the complaint as possible, their bene-  
ficial effects are far superior to those applied  
to the extremities. In some cases of dysentery  
where the tenesma and tenesmus continues for  
some time, and proves a great source of irritation  
opium answers very well in the form of injec-  
tion or where there is much excoriation, a sol-  
id pill of opium introduced up the rectum, but  
the best injection is fresh butter or hogs lard, in  
this stage, I have seen it given in several instan-  
ces with decided utility and while it calms  
irritation gently opens the bowels. Much has  
been said with regard to sugar of lead, in com-  
bination with opium, but I have never seen the  
former employed alone or in combination with  
the latter, and when given in this way I am -  
much disposed to ascribe the beneficial effects  
produced to the opium. Of mercury urged to

a salivation much has been said by different writers & that it has been employed with success in this disease cannot be denied especially in those cases where it produces a degree of prostration and symptoms of a chronic nature, but in the early stage we are called upon to reduce vascular action by more active measures, In the treatment of this disease it is necessary and a very essential part to attend to the diet of the patient, which should be of a mild nutritious nature, and principally fluid, which consists chiefly of demulcent drinks of which are barley or rice water, mucilage of Gum arabic, or of the slippery elm, sage, arrow root, and chicken tea, and other articles of an easy digestible nature.